

AMENDMENTS TO THE CLAIMS

1-31. (Canceled)

32. (New) A device for therapeutic and cosmetological photoprocessing of biological tissue, comprising:

- an incandescent lamp for emitting electromagnetic radiation;
- a waveguide for directing the electromagnetic radiation toward biological tissue;
- a resistometer for measuring electrical resistance of the incandescent lamp; and
- a power modulator for adjusting power delivered to the incandescent lamp during use based on resistance measurements.

33. (New) The device of claim 32, wherein the power modulator is configured to intermittently increase power to the incandescent lamp such that the power to the incandescent lamp exceeds the nominal power rating of the incandescent lamp.

34. (New) The device of claim 33, wherein the power modulator is configured to decrease the power to the incandescent lamp when the electrical resistance of the incandescent lamp reaches a predetermined value.

35. (New) The device of claim 32, wherein the incandescent lamp includes a halogen lamp.

36. (New) The device of claim 32, wherein the incandescent lamp includes a filament oriented such that a dimension of the filament projected in a plane perpendicular to a surface of the biological tissue is smaller than a dimension of the filament projected in a different plane.

37. (New) The device of claim 36, wherein the incandescent lamp includes more than one filament.

38. (New) The device of claim 36, further comprising:
more than one incandescent lamp.

39. (New) The device of claim 32, further comprising:
a reflector having an inner surface facing the incandescent lamp, the reflector configured

to receive reflected radiation from the biological tissue and return the reflected radiation to the biological tissue,
wherein the waveguide is configured to direct radiation having a wavelength between about 600 nm and about 2500 nm between biological tissue and the reflector.

40. (New) The device of claim 39, wherein the device is configured to nonselectively preheat biological tissue using radiation not reflected from the biological tissue.

41. (New) The device of claim 39, wherein the waveguide comprises a spectral filter and a transparent dielectric.

42. (New) The device of claim 41, wherein the spectral filter comprises a reflecting coating coupled to the transparent dielectric.

43. (New) The device of claim 41, wherein the spectral filter includes a liquid filter for selectively absorbing an infrared component of the emission from the incandescent lamp.

44. (New) The device of claim 41, wherein the spectral filter comprises a fluorescent converter, a nonfreezing coolant fluid, and an optical thermal insulator.

45. (New) The device of claim 41, wherein each of the reflector and the transparent dielectric comprise two halves having a plane of symmetry, each half having an inner surface and an outer surface, each transparent dielectric half mounted proximate to the inner surface of a corresponding reflector half, the transparent dielectric halves configured to grasp biological tissue when the transparent dielectric halves tend toward a closed position, the incandescent lamp located proximate to the inner surfaces of the reflector halves and proximate to the outer surfaces of the transparent dielectric halves.

46. (New) The device of claim 45, wherein the inner surfaces of the reflector halves substantially form an ellipsoid of revolution when the reflector halves are in a closed position, and the inner surfaces of the transparent dielectric halves substantially form a sphere when the transparent dielectric halves are in the closed position.

47. (New) The device of claim 45, wherein the inner surfaces of the reflector halves substantially form an elliptical cylinder when the reflector halves are in a closed position, and

the inner surfaces of the transparent dielectric halves substantially form a cylinder when the transparent dielectric halves are in the closed position.

48. (New) The device of claim 45, wherein the inner surfaces of the reflector halves substantially form an elliptical cylinder when the reflector halves are in a closed position, and the inner surfaces of the transparent dielectric halves substantially form a right prism when the transparent dielectric halves are in the closed position.

49. (New) The device of claim 39, wherein at least a portion of the inner surface of the reflector is configured substantially as a portion of the inner surface of a sphere or ellipsoid having a center of curvature that is substantially located on a facet of the waveguide.

50. (New) The device of claim 49, wherein at least a portion of the inner surface of the reflector is configured substantially as an inclined surface rising from the facet of the waveguide.

51. (New) The device of claim 32, further comprising:
a cooler configured to reduce the temperature of a surface of the biological tissue.

52. (New) The device of claim 32, further comprising:
a pain threshold sensor configured to control the electromagnetic radiation emitted from the incandescent lamp.

53. (New) The device of claim 32, further comprising:
a light interrupter electrically coupled to the incandescent lamp, the light interrupter controlled by a patient activated switch.

54. (New) The device of claim 32, wherein the power supply includes a battery.